

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act,
as amended, (33 U.S.C. §§1251 et seq.; the "CWA"),

City of Portsmouth

is authorized to discharge from a facility located at

Pierce Island and Seacrest Village
Portsmouth, New Hampshire

to receiving waters named

Piscataqua River

in accordance with effluent limitations, monitoring requirements and
other conditions set forth herein.

This permit shall become effective on the date of signature.

This permit and the authorization to discharge expire at midnight,
five years from date of issuance.

This permit supercedes the permit issued on September 3, 1982.

This permit consists of 10 pages in Part I including effluent
limitations, monitoring requirements, etc., and 19 pages in Part II
including General Conditions and Definitions.

Signed this 18th day of January, 1985

David A. Fierro
Director
Water Management Division
Environmental Protection Agency
Boston, MA



REGION I

PART I

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Permit No. NH0100234

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning effective date and lasting through July 1, 1988 the permittee is authorized to discharge from outfall serial number 001 (Pierce Island WWTF).

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>					<u>Monitoring Requirement</u>	
	kg/day (lbs/day)		(specify units)			<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>		
Flow-m ³ /Day (MGD)						Continuous	Daily Avg. Max., Min.
BOD ¹			150 mg/l			1/month	Composite
TSS ¹			192 mg/l			1/month	Composite
Settleable Solids						1/day	Grab
pH			(See Part I, A.1.2)			1/day	Grab
Chlorine Residual			(See Part I, F.1.c)			1/day	Grab
Total Coliform					70/100ml	1/month	Grab

¹ The permittee shall analyze the influent and effluent for BOD and TSS.

The permittee shall maintain at least the present level of treatment and effluent quality.

PART I

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Permit No. NH0100234

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning effective date and lasting through July 1, 1988 the permittee is authorized to discharge from outfall serial number 002 (Seacrest Village WWTF).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirement	
	kg/day (lbs/day)		(specify units)		Measurement Frequency	Sample Type
	Average Monthly	Average Weekly	Average Monthly	Average Weekly		
Flow-m ³ /Day (MGD)					Continuous	Daily Avg. Max., Min.
BOD			150 mg/l		1/month	Composite
TSS			192 mg/l		1/month	Composite
Settleable Solids					1/day	Grab
pH			(See Part I, A.1.a)		1/day	Grab
Chlorine Residual			(See Part I, F.1.b)		1/day	Grab
Total Coliform					70/100ml 1/month	Grab

¹ The permittee shall analyze the influent and effluent for BOD and TSS.

The permittee shall maintain at least the present level of treatment and effluent quality.

PART I

A EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning July 1, 1988 and lasting through expiration, the permittee is authorized to discharge from outfall serial number 001 (Latitude 43°04'24"N, Longitude 70°44'23"W).

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirement</u>	
	kg/day (lbs/day)		(specify units)		<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Average Monthly</u>	<u>Average Weekly</u> <u>Maximum Daily</u>		
Flow-m ³ /Day (MGD)			(4.5)		Continuous	Daily Avg. Max., Min.
BOD	2559(5630)		150 mg/l		weekly	Composite
TSS	2132(4691)		125 mg/l		weekly	Composite
Settleable Solids				0.5 ml/l	daily	Grab
pH		(See Part I, A.1.a)			daily	Grab
Chlorine Residual		(See Part I, F.1.b)			1/day	Grab
Total Coliform				70/100ml	weekly	Grab
*Priority Pollutants						

*Before the expiration of this permit the discharge shall be analyzed for the toxic and priority pollutants outlined in Tables II and III of Appendix D of Part 122, 48 Federal Register 14176, April 1, 1983. The name and model number of the instrumentation used and detection limits of each pollutant shall be included in the monitoring report.

- a. The pH of the effluent shall not be less than 6.5 nor greater than 8.0 at any time, unless these values are exceeded due to natural causes or as a result of the approved treatment processes.
 - b. The discharge shall not cause visible discoloration of the receiving waters.
 - c. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
 - d. When the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the designed flow, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.
2. All POTWs must provide adequate notice to the Director of the following:
- a. Any new introduction of pollutants into that POTW from an indirect discharger in a primary industry category discharging process water; and
 - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - c. For purposes of this paragraph, adequate notice shall include information on:
 - (1) the quality and quantity of effluent introduced into the POTW; and
 - (2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
3. Development of Limitations for Industrial Users:
- a. Pollutants introduced into POTW's by a nondomestic source (user) shall not Pass Through the POTW or Interfere with the operation or performance of the works.
 - b. All POTW's shall, in cases where pollutants contributed by User(s) result in Interference or Pass-Through, and such violation is likely to recur, develop and enforce specific effluent limits for Industrial User(s), and all other users, as appropriate, which together with appropriate

changes in the POTW Treatment Plant's Facilities or operation, are necessary to ensure renewed and continued compliance with the POTW's NPDES permit or sludge use or disposal practices. Specific effluent limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.

- c. Where specific prohibitions or limits on pollutants or pollutant parameters are developed by a POTW in accordance with paragraph (b) above such limits shall be deemed Pretreatment Standards for the purposes of section 307(d) of the Act.
- d. If, within 30 days after notice of an Interference or Pass Through violation has been sent by EPA to the POTW, and to persons or groups who have requested such notice, the POTW fails to commence appropriate enforcement action to correct the violation, EPA may take appropriate enforcement action.

B. COMBINED SEWER OVERFLOW REQUIREMENTS

- 1. From the effective date of this permit, the permittee is authorized to discharge from combined sewer overflows (CSOs) (003-010, 012) as listed in attachment A of this permit, provided the discharges receive Best Practicable Treatment. Best Practicable Treatment (BPT), at a minimum, is the most economical treatment necessary so that the discharge does not violate the water quality standards of the receiving water and contains no seepage or holding tank waste.
- 2. CSO numbers 003 through 009 shall be eliminated as described in section D.
- 3. A monitoring program adequate to evaluate compliance with paragraph 1 above shall be developed for CSO numbers 010 and 013. The monitoring program shall be designed to:
 - a. Adequately assess compliance or non-compliance with water quality standards for the receiving water during wet and dry weather and low flow conditions.
 - b. Provide an assessment of individual overflow impacts on the receiving water.
 - c. Provide sampling locations, frequencies, and parameters necessary to obtain representative results and comparison with water quality standards.
 - d. Provide for reporting of results to EPA and the State periodically, but no less frequent than annually.

3. Within two months of the effective date of this permit, the permittee shall submit a proposed monitoring program to EPA and the State for review and approval. Upon approval, the permit will be modified to incorporate this program.

C. ADDITIONAL MONITORING REQUIREMENTS

The Permittee shall implement the water quality monitoring program as described below. The primary objective of this program is to characterize conditions at the existing outfall site, monitor for discharge related ecosystem impacts, and assess the appropriateness of the permit requirements.

1. Water Quality Monitoring Program:

The objective of this program is to determine compliance with water quality standards and the criteria in Section 301(h) of the Clean Water Act.

a. Sampling.

- (1) Using standard monitoring and quality control procedures, the parameters listed below shall be measured at the surface and bottom at two sampling stations; one just beyond the ZID boundary and the other outside the influence of the discharge, or any other discharge, to be used as a control site. The control shall be located at the same water depth and over the same substrate type as the station just beyond the ZID boundary. The station just beyond the ZID boundary shall be placed on the downcurrent boundary of the ZID. The measured parameters shall be:

dissolved oxygen	turbidity
pH	total coliform bacteria
salinity	suspended solids
temperature	BOD
total residual chlorine	

If no significant differences are noted between these two stations after two sampling episodes, the control station will be eliminated.

- (2) Water quality sampling shall be conducted annually during a summertime ebb slack tide.

b. Monitoring reports.

- (1) Monitoring reports shall note any observed surfacing of the effluent plume in a visible boil, the presence of floatable material, and any surface film, sheen, or discoloration.

- (2) These reports shall be submitted at the end of each sampling period as specified in Part E, Reporting Requirements. The water quality monitoring reports shall contain a narrative description of the sampling procedures and locations, a map of the stations sampled and a copy of all data collected during each sampling period.

D. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations and/or conditions specified for discharges in accordance with the following schedule:
 - a. By February 1, 1984, begin design of upgrade of treatment facility.
 - b. By September 1, 1985, complete design of upgrade of treatment facility.
 - c. By July 1, 1988, complete construction of upgrade of treatment facility.
 - d. Submit reports on the progress of construction on June 1, 1986, June 1, 1987, December 1, 1987, and April 1, 1988.
2. Within 6 months of the effective date of this permit the Permittee shall develop and submit to EPA a Municipal Compliance Plan (MCP). Upon approval by EPA, the permit will be modified to incorporate the approved schedule. Enclosure I identifies the information to be included in the MCP.
3. Eliminate CSO numbers 003 through 009 by April 1, 1986.
 - a. Submit a progress report on the elimination of CSOs to EPA and the State by September 1, 1985.
4. The permittee shall develop a public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into its POTW.
 - a. Within 180 days from the effective date of this permit, the Permittee shall notify each user of the sewer system of the need to minimize the entrance of nonindustrial toxic pollutants and pesticides into the treatment system.
 - b. A report shall be submitted annually by December 31 summarizing the actions being undertaken to control non-industrial sources of toxic pollutants and pesticides.

E. REPORTING REQUIREMENTS

1. Effluent Monitoring:

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the month following the completed reporting period.

Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Permit Compliance Section
Compliance Branch
Water Management Division
Environmental Protection Agency
JFK Federal Building
Boston, MA 02203

The state agency is:

New Hampshire Water Supply and
Pollution Control Commission
Hazen Drive - P.O. Box 95
Concord, New Hampshire 03301

2. Additional Monitoring:

The water quality monitoring reports shall be submitted by September 30 of each year.

F. STATE PERMIT CONDITIONS

1. The permittee shall comply with the following conditions which are included as State Certification requirements.
 - a. Pursuant to State Law N.H. RSA 149:8, II(a), changes in volume or character of pollutants received by Publicly Owned Treatment Works (POTW) (sewage system, treatment facility, and/or appurtenances) of 5000 gallons per day and/or 50 population equivalents and greater required submittal for approval of a "discharge permit request form" to the New Hampshire Water Supply and Pollution Control Commission at least 30 days before the proposed changes are to take place.
 - b. The total chlorine residual of the effluent shall not result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards, the permittee being so notified.
 - c. The permittee shall not at any time, either alone or in conjunction with any person or persons, cause directly or indirectly the discharge of any waste into the said receiving waters except that has been treated in such a manner as will not lower the Class B quality or interfere with the uses assigned to said waters by the New Hampshire Legislature (Chapter 311, Laws of 1967).

ENCLOSURE I

The Permittee is required to develop a Municipal Compliance Plan (MCP) identifying how and when it will come into compliance with the requirements of the CWA by July 1, 1988. The MCP must identify:

- A. The treatment technology needed to achieve compliance, and estimates of its capital requirements and operation, maintenance, and replacement (OM&R) costs.
- B. The financial mechanism to be used for POTW construction and for generating adequate revenues for OM&R.
- C. A proposed fixed date compliance schedule, including, at a minimum, the milestones by which construction will be started, completed, operational level attained, and compliance achieved with applicable effluent limits.
- D. Any appropriate interim steps, such as improved O&M procedures or the upgrade of existing facilities that will insure progress toward compliance with permit requirements.

Please answer the following questions and complete Table I showing the earliest dates by which Portsmouth's wastewater treatment facility will be in compliance with the final effluent limitations. These questions should be answered based on the assumption EPA construction grants will not be available. State in detail any facts or circumstances which will prevent Portsmouth from completing construction of the required facilities by July 1, 1988.

